

UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

EVONIK DEGUSSA GMBH,

Plaintiff,

v.

MATERIA, INC.,

Defendant.

Civ. No. 09-636 (NLH/JS)

OPINION

APPEARANCES:

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HILLMAN, District Judge:

Presently before the Court is Defendant Materia's remaining invalidity counterclaim: the asserted indefiniteness of claims 8-10 of Plaintiff Evonik's '528 patent. In January, 2017, the Court held a jury trial on the issues of lack of enablement, lack of an adequate written description, willfulness of Materia's infringement, and damages. The jury found for Evonik on both invalidity counterclaims, and awarded damages to Evonik for Materia's infringement of the '528 patent, but found for Materia on the issue of the willfulness of that infringement. The parties have now filed post-trial briefs on indefiniteness. The Court construes the briefs as cross-motions for summary judgment on this issue of law. The Court heard oral argument on June 20, 2017.

I.

The parties' arguments concerning the indefiniteness of Claims 8-10 have remained rather constant throughout this

litigation.¹ The Court observed in its *Markman* opinion, "[i]n its simplest form, Evonik's argument is that the term N-heterocyclic carbene as utilized in Claim 8 of the patent is a broad term that includes more chemical structures than just those depicted in Formulae II-V." (Docket entry # 434, p. 17) "Defendants, on the other hand, allege that Plaintiff's proffered definition is boundless." (Id. at p. 19) The Court ultimately adopted Evonik's proposed construction, thereby setting the stage for Materia's subsequent indefiniteness argument at summary judgment.

Indeed, at summary judgment, Materia argued

that Evonik is trying to introduce a subjective, ambiguous limitation which includes only NHC ligands that one of the ordinary skill of the art would have contemplated as being a "useful" ligand. Materia points to Evonik's response to its Request for Admissions wherein [Evonik] admitted that certain chemical structures were NHCs as defined by the Court but could not determine whether each chemical structure "exists or whether a person of ordinary skill would conceive of, much less attempt to use this hypothetical molecule as a ligand in the way suggested." Materia argues that in this admission Evonik "essentially concedes" that its claims are indefinite. Materia argues there is no objective standard to determine when a NHC could have been contemplated as a useful L1 ligand in metathesis catalyst at the time of invention - thus the invention is indefinite under *Nautilus* because the definition is subjective and uncertain. Under Evonik's "subjective" definition, Materia argues, one skilled in the art would

¹ In light of the length of this litigation, and the present procedural posture of this case, the Court writes primarily for the parties. Familiarity with the underlying patented technology, the case's procedural history, and the Court's previous opinions is presumed.

not know whether "acyclic carbenes" are NHC's because Evonik's definition does not state whether the carbene atom is present in the ring containing at least one nitrogen atom.

Evonik, 2015 U.S. Dist. LEXIS 175296 a *27-29.

Evonik responded,

there is no reason for this motion because Materia concedes that the Court's definition of NHC provides an objective criteria for someone skilled in the art to know whether a chemical structure is a NHC, thereby satisfying the definiteness requirement. Evonik asserts it is seeking a common sense interpretation based on scientific knowledge and experiments that can be objectively measured and evaluated by a person of ordinary skill in the art.

Id. at *29.

The Court rejected Materia's argument, concluding that *Nautilus*, and the Federal Circuit's post-*Nautilus* decision in *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364 (Fed. Cir. 2014), were distinguishable from this case. The Court held, "[t]he Court does not agree that Evonik's claims are suddenly subjective. Instead, Evonik is bound by the objective definition of NHC as construed by the Court. Accordingly, [Materia's motion for] summary judgment is denied." *Id.* at *30.

II.

The Court applies the basic summary judgment standard set forth in its previous opinion addressing Materia's Motion for Partial Summary Judgment of Invalidity Due to Indefiniteness as to Claims 8-11 of the '528 Patent. *See Evonik Degussa GmbH v.*

Materia Inc., 2015 U.S. Dist. LEXIS 175296 at *6-8 (D. Del. Dec. 21, 2015).² Indefiniteness must be proven by clear and convincing evidence. *Talecris Biotherapeutics, Inc. v. Baxter Int'l Inc.*, 510 F. Supp. 2d 356, 358 (D. Del. 2007)(citing

² In supplemental briefing invited by the Court, *Materia* asserts that its application should be construed as a motion for findings of fact and conclusions of law pursuant to Fed. R. Civ. P. 52. *Evonik* contends that summary judgment is the correct procedural mechanism for deciding indefiniteness.

The Court concludes that summary judgment is most appropriate. The parties agree that indefiniteness is an issue of law. Simply stated, there are no facts for this Court to find. Testimony of the parties' experts is helpful to the Court in informing its legal analysis, but the Court's decision is not based on any "evidence" other than the language of the "claims . . . read in light of the patent's specification and prosecution history." *Nautilus*, 134 S. Ct. at 2128.

Materia states that it "is unable to find any rule or precedent that would allow a court to decide an issue on summary judgment after a full trial on the merits has occurred." (Docket #961, p. 2) In the Court's view, however, the authority is in the summary judgment rule itself, which states that a motion for summary judgment can be brought at any time if "the court orders." Fed. R. Civ. P. 56(b). *Cf.*, *Talecris Biotherapeutics, Inc. v. Baxter Int'l Inc.*, 510 F. Supp. 2d 356, 358 (D. Del. 2007)(granting summary judgment sua sponte, on the issue of indefiniteness).

Of course summary judgment is very often a pretrial procedure, as the cases *Materia* cites demonstrate. Indeed, perhaps it necessarily must be a pretrial procedure when the issue is whether there are disputed issues of material fact. But that is never the issue when the Court considers indefiniteness-- whether decided pre-trial or post-trial. The issue is whether Claims 8-10 are indefinite "as a matter of law." Fed. R. Civ. 56(a). Thus, the Court concludes that summary judgment is the most appropriate procedural vehicle for deciding the issue presently before the Court. In the alternative, we consider *Materia's* motion as one for reargument under Delaware local rule 7.1.5 of our December 21, 2015 summary judgment opinion, a motion we would deem as timely filed.

Robotic Vision Sys., Inc. v. View Eng'g, Inc., 189 F.3d 1370, 1377 (Fed.Cir. 1999)).

III.

Now, post-trial, Materia again argues that "the scope of Claims 8-10 is not defined with reasonable certainty" because "there is no objective dividing line with respect to how and when the POSITA would have contemplated a particular chemical structure as being potentially useful in a metathesis catalyst in 1998." (Moving Brief, p. 8) According to Materia, Evonik's own expert, Dr. Cooper, even says so. At trial, Dr. Cooper testified,³

Q. You can't tell the jury what objective criteria a person of skill in the art should apply to arrive at the universe of contemplated NHCs, can you?

A. I'm not limiting it to contemplated NHCs. All of the NHCs that are, by definition, the court's definition, fall within the scope of claim eight. Some of them are more productive than others, that's all.

. . . .

MR. KRAVITZ: I'm showing the witness page 224 from his 2014 deposition.

BY MR. KRAVITZ: Q. Dr. Cooper, if you could please read that question and answer to the jury.

A. Okay. Question: "What is the dividing line between the two?" Answer. "Well, there's no objective dividing line. It would be a matter of judgment."

³ Among other things, Dr. Cooper testified as to issues relevant to Materia's counterclaims / defenses of lack of enablement and lack of an adequate written description.

Q. There's no objective dividing line, it would be a matter of judgment, right, Dr. Cooper?

A. Yes.

Q. If it's not an objective dividing line and it's a matter of judgment, is it not subjective?

A. Well, that's referring to which [NHCs] would be most useful.

Q. Which ones would be contemplated, in other words, as you described in your deposition?

A. Yes. That's a matter of judgment.

Q. So whether or not something is a contemplated NHC would be a matter of judgment, right?

A. Yes.

. . . .

Q. . . . Where is the line that the person of skill in the art is going to draw to determine which are the ones that are most likely to be useful and which ones are not?

A. Well, I think that many of the, in fact, almost all of the RFAs [NHCs] that were drawn would be virtually impossible to synthesize. I think many of them would be difficult to synthesize and not be particularly useful, and so they would be drawn to inoperative embodiments of the invention.

Q. And so you get to disregard them, right?

A. No. As I said, I didn't disregard them. I didn't think of them in the first place.

Q. Now that you're thinking of them, you're disregarding them, aren't you?

A. I view them as a bit on the silly side, frankly.

Q. Okay. So you're not considering them to be in your universe of contemplated NHCs, right?

. . .

A. Well, I consider them within the scope of claim eight because I think that's certainly true. I don't think that they would be something that somebody trying to practice the invention would be interested in pursuing.

Q. So they're not contemplated, correct?

A. I did not contemplate them, no.

Q. Did the person of skill in the art contemplate those in 1998?

A. Would someone of skill in the art have contemplated them then? I don't think so.

Q. But you don't know, do you?

A. No, of course not.

Q. Because that requires subjective judgment to make that determination, right?

A. Well, it's a matter of judgment, yes.

Q. And just so I'm clear, Dr. Cooper, what happens when there is a dispute between two eminently qualified chemists about whether or not a particular ligand structure would have been contemplated back in 1998 or not?

A. It's a matter of debate.

Q. And a matter of subjective judgment?

A. A matter of opinion I would say.

. . . .

Q. So at what point does that person have the right to give up and decide that that's not a contemplated ligand?

A. Well, I can't give you a number for this. It's a matter of when you decide that I don't think this is

going to work. That's almost, that's a matter of personal judgment.

Q. There's no objective dividing line, is there?

A. There's no objective dividing line in doing any chemical research of that type because some people have magic hands that can make reactions work and they're really good at it, and other people cannot. And it's very common.

(Trial Transcript, p. 2533-34; 2544-46; 2549-50)

In opposition, Evonik again argues that the Court has already (perhaps implicitly) decided that Claims 8-10 are not indefinite-- either during claim construction, or at summary judgment, or both.⁴

Alternatively, Evonik argues that a POSITA would use his or her scientific training and professional experience to determine which NHCs might work, thereby rendering Claims 8-10 definite:

Q. So when you say they were not something someone would think to practice, what do you mean by that?

A. Well, I mean if somebody's trying to practice the invention, they're trying to maximize the chance of success, they're not trying to find something that won't work. Within the scope of the broad patent claims there are invariably some embodiments, some manifestations that won't work. And if you lay awake at nights you can think of some of those and come up with them. But if you're actually trying to practice the invention, you're doing just the opposite. You're trying to figure out what is most likely to work and how you can achieve your result, not how you can frustrate your result.

⁴ At oral argument, Materia's counsel stated, "typically indefiniteness or definiteness is a concept that's addressed at the claim construction stage. It's the flip side of claim construction." (June 20, 2017 Transcript, p. 16-17)

(Id. at p. 2500)

To the extent this issue remains undetermined by the Court after the pre-trial motions for summary judgment, we now expressly hold that Claims 8-10 of the '528 patent are not indefinite. Materia's indefiniteness argument assumes a more exacting legal standard than *Nautilus* requires. "[A]bsolute or mathematical precision [of claim language] is not required." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014). Rather, the certainty necessary for definiteness is only that which is reasonable under the unique circumstances of the case and relevant industry or scientific discipline. Accordingly, reasonable certainty may be defined by how a POSITA would approach making and using the claimed invention. See *Carnegie Steel Co. v. Cambria Iron Co.*, 185 U.S. 403, 437 (1902)(any description sufficient to apprise industry practitioner of the definite feature of the invention and serve as adequate warning to others will sustain the patent).

Here, the Court finds that the claim language at issue "provide[s] enough certainty to one of skill in the art when read in the context of the invention." *Interval Licensing LLC v. AOL, Inc.*, 766 at 1370. First, *Nautilus* and *Interval Licensing* which struggled with the inherent limitations of language and the vagaries of generalized subjective phrases ("spaced relationship" in *Nautilus*; "unobtrusive manner" in *Interval*

Licensing), the Court's claim construction leaves no doubt as to the meaning of NHC. From that starting point, Dr. Cooper's testimony, which focuses on and explains how a POSITA would read and practice the patent, supports the conclusion that, within that well-defined and clear category, a POSITA would know instinctively and by training what would and would not work.

While *Nautilus* rejected the overly broad and amorphous concepts of "not amenable to construction" or "insolubly ambiguous", the Court confirmed its earlier precedents that if the patent as a whole is clear enough that a POSITA could practice the claimed invention, § 112 is satisfied. See *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45, 58 (finding definite patent for improvement for paper-making machine where reader skilled in the art of paper making could define the meaning of "substantial elevation" in actual use of the machine).

To the extent that Dr. Cooper acknowledges some degree of uncertainty⁵ as to which NHCs might be more amenable to

⁵ We recognize that Professor Jacobsen, Materia's expert, opines in contrast that no objective basis exists to determine which NHC a POSITA would or would not have contemplated for use in a metathesis catalyst in 1998. We find Professor Cooper's ultimate opinion that a POSITA would use his or her informed judgment in making that cut to be more persuasive and more than sufficient to establish the "reasonable certainty" *Nautilus* requires. In that regard, Materia has failed to meet its burden of clear and convincing evidence of indefiniteness. We note here, that while indefiniteness is a legal question for this

successful application, we view his testimony as more of an honest assessment of the challenges of the scientific method and lab work in general than the type of subjectivity barred by *Nautilus*. Just because something is difficult hard and may not work for every POSITA every time is a practical reality across many scientific endeavors. We do not read *Nautilus* as to invalidate a patent for an inventor who solves a challenging problem. Difficulty in application is not uncertainty in description or concept. *Nautilus*⁶ and § 112 prohibit only the latter.⁷

Court, the jury heard both experts and the other evidence on the issue of non-enablement and lack of written description and found Professor Jacobsen's related testimony on those issues to be unpersuasive. While not binding on this court, the jury determination that the metes and bounds of the invention were sufficiently clear and that the invention was sufficiently enabled without undue experimentation is consistent with our determination the claims did not suffer from indefiniteness.

⁶ We note here that on remand the Federal Circuit in *Nautilus* determined that a skilled artisan would have understood how to gauge the "spaced relationship" described in the patent in suit in that case. There, as here, a POSITA would understand the "inherent parameters" of the invention. *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374 (Fed. Cir.), cert. denied, 136 S. Ct. 569, 193 L. Ed. 2d 431 (2015).

⁷ The *Nautilus* Court was clearly concerned that the Federal Circuit's "amenable to construction" and "insolubly ambiguous" standards would stifle innovation. Imprecision that creates "a zone of uncertainty" would discourage "enterprise and experimentation" by anyone reasonably adverse to the risk of an infringement action. *Nautilus*, 134 S.Ct. at 2129 (quoting *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942)). But an interpretation of *Nautilus* that creates too exacting a standard for definitiveness also presents a risk of

Accordingly, Materia's Motion for Summary Judgment will be denied, and Evonik's Cross-Motion for Summary Judgment will be granted.

IV.

For the reasons set forth above, the Court concludes that Claims 8-10 of the '528 patent are not indefinite. Summary judgment will be granted to Evonik on Materia's counterclaim of invalidity due to indefiniteness. An appropriate order accompanies this Opinion. Further, as all remaining defenses to infringement of the '528 patent have now been adjudicated, the Court will enter Judgment on the jury's verdict.

Dated: August 9, 2017
At Camden, New Jersey

s/ Noel L. Hillman
NOEL L. HILLMAN, U.S.D.J.

disincentive. See *Nautilus*, 134 S.Ct. at 2128 (some modicum of uncertainty is the "price of insuring the appropriate incentives for innovation[]")(quoting *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 732 (2002)). Between those twin evils of the pendulum swing lies the anchor of the POSITA. *Carnegie Steel Co. v. Cambria Iron Co.*, 185 U.S. 403, 437 (1902)(patents addressed not to the public but those skilled in the art). Here, Dr. Cooper's testimony makes clear that a POSITA would approach claims 8-10 of the '528 patent with a view toward ignoring those formulations that would not work and adopting those that would.